



The Path to Career Success: High School Achievement, Certainty of Career Choice, and College Readiness Make a Difference

Introduction

It is essential for all students to be ready for college and career when they graduate from high school. Postsecondary educators expect high school graduates to be prepared academically for success in postsecondary education (ACT, 2005), which in turn influences success in the work world. Employers continue to call for workers to have the tools needed to perform well on the job and stay in the job (The Conference Board, Inc., 2006). In the United States today, “all American workers [should] have the opportunity to equip themselves with the necessary tools to succeed in their careers” (U.S. Department of Labor, 2007).

How can future workers better prepare for career success? We examined three indicators of early career success: college degrees obtained in career field of interest, job attainment in career field of interest, and satisfaction in these jobs. Data reported here are from a recent study based on 12,019 full-time employees who earned degrees from 293 colleges or universities in 39 states; these employees had completed the ACT® test during high school and were later surveyed about their college experience, their current job, and their job satisfaction.¹ By examining results from these employees we were able to answer important questions about the effects of high school academic achievement, certainty of occupational choice, and college readiness on early career success.²

Our results demonstrate that academic achievement (as represented by ACT Composite score³), certainty about one’s occupational choice,⁴ and college readiness in all four subject areas (as represented by attainment of the ACT College Readiness Benchmarks⁵) are positively associated with early career success. These factors, separately and in combination, improve students’ chances of attaining college degrees and jobs consistent with their occupational choices, as well as increase the likelihood that as employees these students will be satisfied with important aspects of their jobs.

Strong Academic Achievement and More-Certain Career Plans in High School Improve Chances of Meeting College and Career Goals

ACT research shows that academic achievement in high school is a strong predictor of college degree attainment (ACT, 2007). It also shows that high

school students who are ready for the academic challenges of college are more likely to complete a college degree (ACT, 2008).

In addition, research by others has shown that more well-defined career plans or goals positively influence decisions to remain in college (Tinto, 1993).

According to Hull-Blanks, Kurpius, Befort, Sollenberger, Nicpon, and Huser (2005), students with a “defined job-related career goal” were more likely to decide to persist in college than students without such a career goal. In another study involving Asian international students, Singaravelu, White, and Bringaze (2005) showed a positive relationship between career certainty and intent to persist in college. Further, Ting (1997) found that setting long-term career goals predicted positive academic performance. And, Altmaier, Rapaport, and Seeman (1983) reported that uncertainty about career goals contributed to poor academic performance.

It follows that those students who achieve higher Composite scores on the ACT and are more certain about their choice of occupation will perform better academically in college, and are more likely to persist to graduation and attain degrees in their chosen career fields.

Our study of employed alumni corroborates these findings—strong academic achievement and more-certain occupational choices positively contribute to degree attainment in careers of interest.

Figure 1: College Degree Attainment in Career Field of Interest, by Certainty of Occupational Choice and ACT Composite Score Range

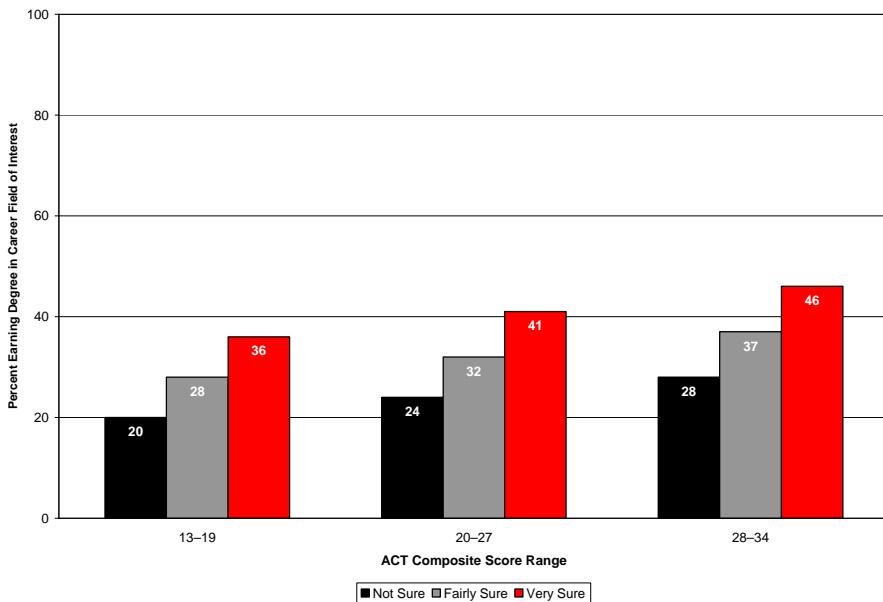
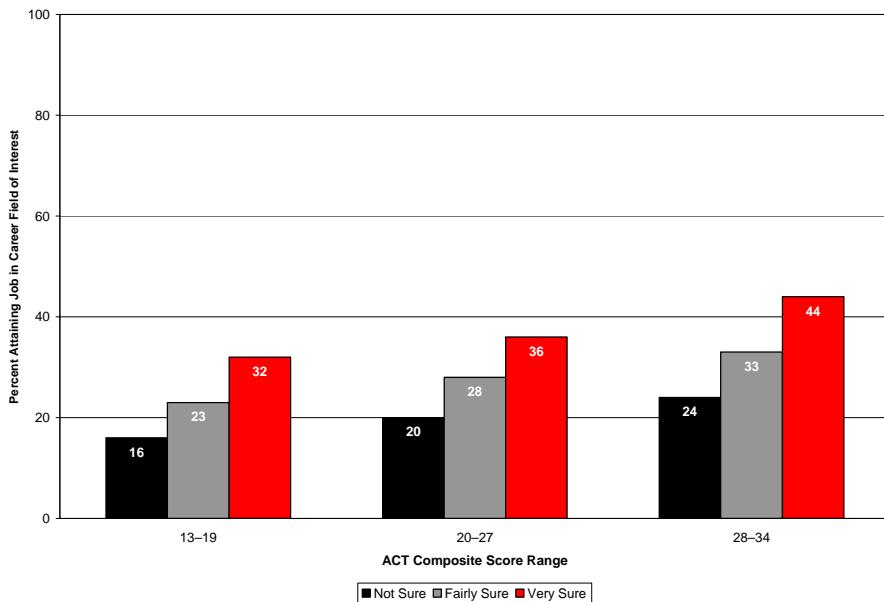


Figure 1 shows that college alumni who were very sure of their occupational choices were more likely to earn degrees in their career field of interest than alumni who were fairly sure or not sure of their occupational choices. College alumni who were fairly sure of their occupational choices when they took the ACT were also more likely to earn degrees in their chosen career field than those who were not sure.

In addition, the figure shows that at all three levels of occupational-choice certainty, college alumni with ACT Composite scores from 28 to 34 were more likely to earn degrees in their career field of interest than alumni who scored from 20 to 27. Similarly, alumni who scored from 20 to 27 were also more likely to earn degrees in their chosen career field than alumni who scored from 13 to 19.

Expressed career aspirations or goals have also been shown to predict job attainment (Gottfredson & Becker, 1981; Schoon & Parsons, 2002; Mau & Bikos, 2000), another mark of career success. Academic skills also predict future occupational attainment (Austin & Hanisch, 1990). So it would also follow that students who achieve higher scores on the ACT and are more certain about their occupational choices will obtain jobs in their chosen career fields.

Figure 2: Job Attainment in Career Field of Interest, by Certainty of Occupational Choice and ACT Composite Score Range



As seen in Figure 2, college alumni who were very sure of their occupational choices were more likely to attain jobs in careers they aspire to than alumni who were fairly sure or not sure of their occupational choices. College alumni who were fairly sure of their occupational choices when they took the ACT were also more likely to attain jobs in their chosen career field than those who were not sure. And at all three levels of occupational-choice certainty, college alumni with ACT Composite scores from 28 to 34 were more likely to attain jobs in their career field of interest than alumni who scored from 20 to 27, while alumni who scored from 20 to 27 were more likely to attain such jobs than alumni who scored from 13 to 19.

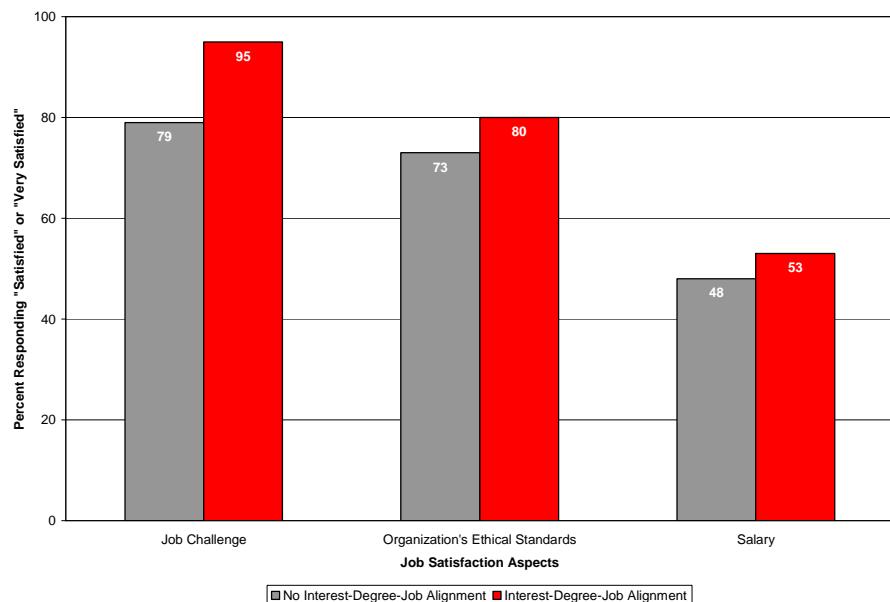
Degree and job attainment in careers of interest are positively influenced by strong academic achievement and certainty of one's occupational choice. For future workers, attaining these goals can ensure that they are on track for early career success.

Career Fit—and College Readiness—Enhance Job Satisfaction

According to Holland (1997), persistence at and satisfaction with work are a function of the degree of fit between an individual's occupational interests and his or her job environment. More people whose interests align with their job choices would be expected to be satisfied with various aspects of their jobs than people whose interests and job choices do not align. The results of our study are consistent with this conclusion.

While there are many aspects to job satisfaction, in our study we focused on three that highlight differences between the satisfaction level of employed alumni whose occupational interests, college degree fields, and job choices were aligned with one another and the satisfaction level of those alumni whose interest, degrees, and jobs were not aligned. These three aspects are: job challenge, organization's ethical standards, and salary (Figure 3).

Figure 3: Job Satisfaction of Employed College Alumni, by Interest-Degree-Job Alignment



The figure shows that of these three aspects, alumni with interest-degree-job alignment were most satisfied with the challenge of their jobs: the percentage of alumni in the alignment group who were satisfied with this aspect was 16 percentage points higher than that of those in the nonalignment group. The percentage of alumni in the alignment group who were satisfied with their organization's ethical standards was 7 percentage points higher than that of those in the nonalignment group, and the percentage of alumni in the alignment group who were satisfied with their salary was 5 percentage points higher than that of those in the nonalignment group.

Further, within our sample of employed college alumni we isolated those whose occupational choices, degree fields, and job choices were aligned with one another, comparing the job satisfaction of those who met all four ACT College Readiness Benchmarks with that of those who did not meet all four Benchmarks. Among college alumni with interest-degree-job alignment, a

greater percentage of alumni who met all four ACT College Readiness Benchmarks were satisfied with each of the three aspects of their jobs than were alumni who did not meet all four Benchmarks (Figure 4).

Figure 4: Job Satisfaction of Employed College Alumni with Interest-Degree-Job Alignment, by ACT College Readiness Benchmark Attainment

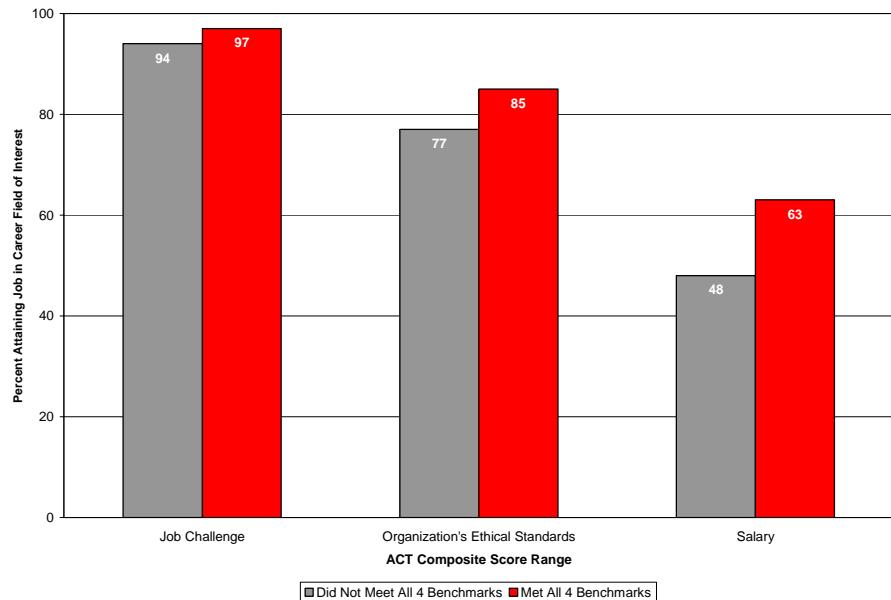


Figure 4 shows that of the three aspects, alumni with interest-degree-job alignment who met all four ACT College Readiness Benchmarks were most satisfied with their salary: the percentage of these alumni who were satisfied with this aspect was 15 percentage points higher than that of those who did not meet all four Benchmarks. The percentage of alumni with interest-degree-job alignment who met all four Benchmarks and were satisfied with their organization's ethical standards was 8 percentage points higher than that of those who did not meet all four Benchmarks, and the percentage with interest-degree-job alignment who met all four Benchmarks and were satisfied with the challenge of their jobs was 3 percentage points higher than that of those who did not meet all four Benchmarks.

Note also that, while more alumni with interest-degree-job alignment were satisfied with each of the three aspects of job satisfaction than were alumni without such alignment (see Figure 3), the percentages of satisfied alumni with interest-degree-job alignment who met all four Benchmarks were even higher (see Figure 4). This means that college readiness in all four subject areas further enhanced job satisfaction *among* employed alumni whose occupational choices, degree fields, and current jobs were aligned. Thus, ACT research has shown for the first time that not only career fit *but also college readiness* positively influences job satisfaction.

Conclusion

Our findings clearly show that strong academic achievement, certainty of occupational choice, and college readiness promote degree and job attainment in careers of interest and job satisfaction. These results reinforce the need for all high school graduates to be prepared for college and career. Students who meet

all four ACT College Readiness Benchmarks and develop more-certain occupational choices are more likely to have early career success. Even for young people who may not be able to directly apply all of their career interests in the world of work (e.g., due to limited opportunities in various fields during difficult economic times), academic preparation and strong career preferences can better position individuals to make career choices that are suited to their skills and interests. Such preparation can strengthen the future workforce and ensure students' long-term success in the U.S. labor market.

The path to career success is now even more apparent, and educators, counselors, and parents can help to communicate and emphasize the importance of academics and career planning by following a few guidelines:

- Encourage students to think about and highlight the connections between skills developed in English, mathematics, reading, and science and the skills used in occupations.
- Help students connect their own academic studies to the world of work and their interests in an effort to motivate students to see the relevance of their academic efforts.
- Talk to high school students about the characteristics of successful college students, including their levels of academic preparation and the influence of their career goals.
- Expose students to a wide range of career alternatives in an effort to promote interest development.
- Provide students with opportunities to have career-related success experiences that can serve to further reinforce students' interests in, and pursuit of, various occupations.
- Provide students with adult mentors who can help students establish realistic career and educational plans.

Notes

¹ The data used in this study were from the ACT Alumni Outcomes Survey. These data were collected from college alumni between 1996 and 2006. The Alumni Outcomes Survey is a service provided by ACT. Its purposes are to assess alumni perceptions regarding the college's impact on their personal and professional growth and development, and to provide detailed employment and educational histories. Survey results were matched to ACT historical records that contained assessment information (obtained when the alumni were high school students in grade 11 or 12), including demographic characteristics, career interests, career plans, and ACT Composite scores.

² Results were examined using descriptive statistics, correlational analyses, and regression analyses.

³ Scores on each of the four sections of the ACT (English, Mathematics, Reading, and Science) are reported on a scale from 1 (lowest) to 36. The ACT Composite score is the average of the four subject-area scores, rounded to the nearest whole number.

⁴ When taking the ACT, students are asked to make an occupational choice from a list of 284 occupational fields, and to indicate their degree of certainty about the choice (very sure, fairly sure, or not sure).

⁵ ACT has defined college readiness empirically by establishing College Readiness Benchmarks representing the minimum ACT test scores required for students to have a high probability of success in corresponding credit-bearing first-year college courses. Based on course placement data from a nationally representative sample of postsecondary institutions, the Benchmarks reflect the ACT scores students need to earn to have at least a 75 percent chance of obtaining a course grade of C or better, or a 50 percent chance of earning a grade of B or better. The College Readiness Benchmarks for English, Mathematics, Reading, and Science are 18, 22, 21, and 24, respectively.

References

ACT. (2005). *Courses count: Preparing students for postsecondary success*. Iowa City, IA: Author.

ACT. (2007). *The role of nonacademic factors in college readiness and success*. Iowa City, IA: Author.

ACT. (2008). *What we know about college success: Using ACT data to inform educational issues*. Iowa City, IA: Author.

Altmaier, E., Rapaport, R., & Seeman, D. (1983). A needs assessment of liberal arts students on academic probation. *Journal of College Student Personnel*, 24(3), 266–267.

Austin, J. T., & Hanisch, K. A. (1990). Occupational attainment as a function of abilities and interests: A longitudinal analysis using Project TALENT data. *Journal of Applied Psychology*, 75, 77–86.

The Conference Board, Inc., the Partnership for 21st Century Skills, Corporate Voices for Working Families, & the Society for Human Resource Management. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce*. No. 0-8237-0888-8.

Gottfredson, L. S., & Becker, H. J. (1981). A challenge to vocational psychology: How important are aspirations in determining male career development? *Journal of Vocational Behavior*, 18, 121–137.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Hull-Blanks, E., Kurpius, S. E., Befort, C., Sollenberger, S., Nicpon, M., & Huser, L. (2005). Career goals and retention-related factors among college freshmen. *Journal of Career Development*, 32, 16–30.

Mau, W. C., & Bikos, L. H. (2000). Educational and vocational aspirations of minority and female students: A longitudinal study. *Journal of Counseling and Development*, 78, 186–194.

Schoon, I., & Parsons, S. (2002). Teenage aspirations for future career and occupational outcomes. *Journal of Vocational Behavior*, 60, 262–288.

Singaravelu, H. D., White, L. J., & Bringaze, T. B. (2005). Factors influencing international students' career choice: A comparative study. *Journal of Career Development*, 32, 46–59.

Ting, S. (1997). Estimating academic success in the 1st year of college for specially admitted White students: A model combining cognitive and psychosocial predictors. *Journal of College Student Development*, 38(4), 401–409.

Tinto, V. (1993). *Leaving college and rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.

U.S. Department of Labor. (2007). *The secretary's 21st century workforce initiative*. Retrieved March 19, 2007, from www.dol.gov/21cw/office.htm